

USSN 10/657,417

Election & Preliminary Amendment Responsive to Office Action of April 23, 2004

July 23, 2004

A-1586Con2

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An inertial barrier for protecting a vehicle from a roadway hazard, comprising:

a container having an outer sidewall and an interior volume, and a mating end; and
a pedestal having an outer sidewall, an open end, and a mating end, the pedestal being adapted to mate with and support the container in a vertical stacking orientation to together form said inertial barrier, the open end comprising a base of said barrier, said barrier having an axial height and said pedestal having a width at least equal to the width of said barrier at any other location along said axial height, the barrier at an axial location where the mating ends of each of the container and the pedestal are joined having a width smaller than the width at said barrier base;

wherein a portion of the outer sidewall of the pedestal forms an inwardly tapered conic section, in order to provide increased strength in compression for the barrier in the vicinity of the respective mating ends of each of the pedestal and the container, and further wherein one of the pedestal and container mating ends include a projecting portion, and the other of the pedestal and container mating ends includes a recess portion which is complementary to said projecting portion, so that when said container and said pedestal are joined together in said vertical stacking orientation, said projecting portion is engaged into said recess portion to form an interlocking relationship between the container and the pedestal.

2. (Original) The inertial barrier as recited in Claim 1, wherein said container further comprises an open end which communicates with the interior volume of the container, so that the container interior volume may be filled with a ballasting material.

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3. (Original) The inertial barrier as recited in Claim 2, wherein said ballasting material comprises a dispersible particulate material.

4. (Original) The inertial barrier as recited in Claim 3, wherein said dispersible particulate material comprises sand.

5. (Original) The inertial barrier as recited in Claim 2, wherein said container further comprises a lip circumferentially disposed about the open end thereof, said barrier further comprising a lid for covering the exposed open end of said container, said lip engaging said lid to secure the lid in a closed position.

6.-8. (Canceled)

9. (Original) The inertial barrier as recited in Claim 1, wherein each of said container and said pedestal is comprised of a frangible material.

10. (Original) The inertial barrier as recited in Claim 1, wherein the mating end of each of said container and said pedestal comprises both a projecting portion and a recess portion, such that when the pedestal and the container are stacked together, the projecting portion of the container is inserted into the recess portion of the pedestal, and the projecting portion of the pedestal is inserted into the recess portion of the container, the respective projecting and recess portions of each of the container and the pedestal being complementarily shaped.

11.-20. (Canceled)

21. (Currently Amended) An inertial barrier system for protecting vehicles from a roadway hazard, comprising:

a plurality of inertial barrier units arranged in a predetermined array, at least one of said inertial barrier units being of a multi-piece type comprising:

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a container having an outer sidewall, an interior volume, and a mating end;
and

a pedestal having an outer sidewall and a mating end, the pedestal being adapted to mate with and support the container in a vertical stacking orientation to together form said multi-piece inertial barrier unit;

wherein one of the pedestal and container mating ends includes a projecting portion, and the other of the pedestal and container mating ends includes a recess portion which is complementary to said projecting portion, so that when said container and said pedestal are joined together in said vertical stacking orientation, said projecting portion is engaged into said recess portion to form an interlocking relationship between the container and the pedestal; and

at least a further one of said plurality of inertial barrier units comprising a single-piece unit, including a container at least partially filled with a ballasting material, which is not disposed on a pedestal.

22. (Original) The inertial barrier system as recited in Claim 21, wherein a plurality of said inertial barrier units are of said multi-piece type.

23. (Original) The inertial barrier system as recited in Claim 22, wherein the containers of said multi-piece inertial barrier units are filled to varying levels with a dispersible ballasting material, resulting in inertial barrier units of varying weights.

24. (New) The inertial barrier system as recited in Claim 21, wherein said array comprises heavier inertial barrier units closer to a structure to be protected, and lighter inertial barrier units farther from said structure.

25. (New) The inertial barrier system as recited in Claim 24, wherein said heavier inertial barrier units comprise said single-piece units and said lighter inertial barrier units comprise said multi-piece units.

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26. (New) A method of protecting a vehicle from a roadway hazard, comprising:
providing a container having an outer sidewall, an interior volume, an open end for receiving ballasting material into said interior volume, and a mating end;
providing a pedestal having an outer sidewall and a mating end; and
constructing an inertial barrier for disposition adjacent to said roadway hazard by placing said container atop and above said pedestal.

27. (New) The method as recited in Claim 26, wherein one of the pedestal and container mating ends comprises a projecting portion and the other of the pedestal and container mating ends comprises a recess, which is complementary to the projecting portion, wherein said placing step comprises interlocking said projecting portion and said recess together to join said pedestal to said container.

28. (New) A method of creating an array of inertial barrier units in order to protect a vehicle from a roadway hazard, comprising:

placing one or more heavier inertial barriers, each comprising a container filled with a ballasting material, which is not disposed on a pedestal, nearer to said roadway hazard; and

placing one or more lighter inertial barriers, each comprising a container filled with a ballasting material, disposed atop a pedestal, farther from said roadway hazard;

such that an off-course vehicle, in danger of striking said roadway hazard, will first impact one or more of said lighter inertial barriers, and then, if still in motion, will then impact one or more of said heavier inertial barriers.